Measles, Mumps and Rubella (MMR) Vaccine

Communicable Disease Control – Factsheet

Immunization has saved more lives in Canada in the last 50 years than any other medical intervention. Vaccines help your immune system to recognize and fight bacteria and viruses that cause diseases.

What is the MMR Vaccine?

The MMR vaccine protects against three different diseases that are all caused by viruses. All three of these diseases can cause serious illness and can be fatal.

1. Measles causes a red blotchy rash, high fever, red eyes, runny nose and cough that can last for up to two weeks. Some people also get a middle ear infection or pneumonia. Although rare, measles can lead to swelling of the brain, which can cause seizures, hearing loss, brain damage, or even death.
2. Mumps can cause painful, swollen saliva glands, usually in the cheeks, as well as fever. In adults and children past puberty, mumps sometimes causes painful inflammation in the testicles or ovaries. In rare cases, men may become sterile (unable to have children). In more severe cases, mumps can cause deafness or swelling in the covering of the brain (mumps meningitis) or even death.
3. Rubella, also called German measles, can cause a red rash, fever, sore throat, headache, swollen glands, joint pain and arthritis. Although, serious illness from rubella is rare in children and adults, unborn babies can be very seriously harmed if their mother becomes infected during the pregnancy. Rubella during pregnancy (congenital rubella) can lead to babies being born with heart defects, deafness, blindness, or brain damage. Rubella can even cause pregnant women to have a miscarriage or a still born baby.

The MMR vaccine contains weakened forms of the measles, mumps and rubella viruses. It is approved by Health Canada and is provided at no charge by Manitoba Health as part of your child's routine immunizations.

How are these diseases spread?

Measles, mumps and rubella viruses can all be spread through the air, or through contact with fluids in the nose or throat. The viruses can pass from person to person by coughing, sneezing, or sharing food or drinks. Children may become infected by sharing soothers, bottles or toys that have been in the mouths of other children.

Why should my child get the MMR vaccine?

Immunization is the best way to protect your child against measles, mumps and rubella.

When your child is immunized you also help protect others, because someone who is immunized is less likely to spread infection.

This is especially important with rubella. Immunizing your child helps to protect pregnant women and their unborn babies.

Who should get the MMR vaccine?

All children 12 months of age or older should get the MMR vaccine. For the best protection, two needles several years apart are needed.

MMR vaccine	Child's age at immunization
1st needle	12 months
2nd needle	4-6 years

Adults may also need to get the MMR vaccine, especially women of child-bearing age who are not protected against rubella. Talk to your doctor or primary health care provider for more information.

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Who should NOT get the MMR vaccine?

Pregnant women

Anyone who has had a severe allergic reaction to a previous dose of the MMR vaccine, or to any of the contents of the vaccine (ex. neomycin).

Anyone with a severely weakened immune system. But, anyone with HIV infection should check with their doctor about getting the MMR vaccine.

Anyone who had immune globulins or any other blood products in the past year should speak to their doctor or public health nurse before getting the MMR vaccine.

If your child has any of the following, speak to a public health nurse or doctor before they are given the MMR vaccine:

- a severe allergy to eggs
- thrombocytopenia (low platelets)
- a history of convulsions (or family history)

Your child should not get immunized if they have a high fever. But they can still get the MMR vaccine if they have a mild illness, like a cold.

Women should avoid pregnancy for at least one month after they get the MMR vaccine.

Possible side-effects of the MMR vaccine

Vaccines are known to be very safe. It is much safer for your child to get this vaccine than to get measles, mumps or rubella.

Common reactions to the vaccine include soreness, redness and swelling where the vaccine was given. A red rash may also appear between five and 12 days after the vaccine is given, but it disappears by itself and does not spread to other people.

Some children may have swelling of the glands in the head and neck, fever, drowsiness, fussiness, loss of appetite or an upset stomach. These are generally mild reactions and usually last one to two days.

Temporary joint pain may occur in teenage and adult women.

Occasionally a high fever can cause seizures. Acetaminophen (Tylenol®) or Ibuprofen (Advil®) can be given for fever or soreness.

ASA (Aspirin®) should NEVER be given to children because it can cause a severe liver and brain disease called Reye's Syndrome.

Rarely, mild, temporary blood clotting problems have been reported. In very rare cases, a child may have inflammation of the brain (encephalitis) or deafness. This is so uncommon (about one case per million doses), that it is uncertain whether the vaccine is the cause.

It is important to stay in the clinic for 15 minutes after getting any vaccine because there is a rare possibility of a severe allergic reaction. This can include hives, difficulty breathing, or swelling of the throat, tongue or lips. If this happens after you leave the clinic, **call 911 or go to the nearest emergency department for immediate treatment.**

Report any serious or unexpected side effects to a public health nurse or doctor.

For more information on MMR vaccine:

Talk to your doctor or public health nurse.

Call Health Links-Info Santé in Winnipeg at 788-8200; toll-free elsewhere in Manitoba 1-888-315-9257.

Or visit:

Manitoba Public Health website
www.manitoba.ca/health/publichealth/index.html

Canadian Pediatric Society website
www.cps.ca/English/HealthCentres/immunization.htm

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